AP 1768

Docket No.: 49581/P006US/09604915
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Adam S. Wyszynski

Application No.: 08/579,072 | Confirmation No.: 3750

Filed: December 22, 1995 | Art Unit: 2684

For: SIGNAL-TO-NOISE OPTIMIZED FULLY MONOLITHIC VIDEO RECEIVER IF CHANNEL | Examiner: N. A. Maung

REPLY BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

As required under § 41.37(a), this Reply Brief is filed within one month of the Examiner's Answer dated 03/01/2006, and is in furtherance of the Appeal Brief filed on October 1, 1999.

No fee is required for the REPLY BRIEF.

This brief contains items under the following headings as required by M.P.E.P. § 1208.

I. Status of Claims
II. Grounds of Rejection to be Reviewed on Appeal
III. Arguments

I. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 21 claims pending in application.

B. Current Status of Claims

1. Claims canceled: None

2. Claims withdrawn from consideration but not canceled: None

3. Claims pending: 1-21

4. Claims rejected by Examiner and appealed: 1-21

5. Claims for which the rejection was reversed by the Board: 6, 12, 14 and 19

6. Claims remanded to the Examiner for reconsideration: 1-5, 7-11, 13, 15-18, 20 and 21

C. Claims On Appeal

The claims on appeal are claims 1-5 and 7-11.

II. GROUNDS OF REJECTION REMAINING TO BE REVIEWED ON APPEAL

Whether claims 1-5 and 7-11 properly stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 5,361,395 to Yamamoto ("*Yamamoto*") in view of US Patent No. 5,491,507 to Umezawa ("*Umezawa*") in light of new grounds of rejection asserted by the Board.

III. ARGUMENTS

Appellant notes with appreciation the reversal of the rejections of claims 6, 12, 14 and 19, and respectfully traverses the outstanding rejections of claims 1-5, 7-11, 13, 15-18, 20 and 21. Appellant requests that the Board reverse the outstanding rejections in light of the remarks contained herein.

In the Appeal Brief of December 29, 1998, Appellant argued many of the rejected claims separately. Thus, Appellant respectfully asserts that the separately argued claims do not stand or fall together, *see* 37 C.F.R. § 41.37(c)(1)(vii). Appellant hereby reasserts those arguments that are presented for the separately argued claims in Appellant's Appeal Brief. For brevity, Appellant does not include all of those arguments herein. Rather, Appellant

submits the following supplemental remarks in reply to the Board's decision on September 22, 2003, which included new grounds of rejection, and the Examiner's Response to Remand, dated April 14, 2004. Appellant notes that the Office communication dated March 1, 2006 repeated the same arguments advanced by the April 14, 2004 Response.

A. Background Summary

Claims 1-5 and 7-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yamamoto* in view of *Umezawa*. During a telephonic hearing on September 9, 2003, the Board posed the question to Appellant's representative regarding patentability of independent claims 1 and 7 in light of the recited video signal processing aspect of the claims, as why one of ordinary skill in the art would not have applied a video signal to antenna 11 of *Yamamoto*. This characterization of the applied art provides a modification to the *Yamamoto* circuit resulting in video signal processing being performed instead of the audio processing disclosed in *Yamamoto*. This characterization was contrary to the Appellee's prior stated modification wherein a user receives voice signals and video signals.

In its Decision of September 22, 2003, the Board relied upon the foregoing modification to *Yamamoto* in affirming Appellee's rejection of the claims. As conceded by the Board in its Decision of September 22, 2003, Appellant's representative set forth argument offering substantial evidence tending towards the unobviousness of applying a video signal to the circuit of *Yamamoto*, and that the foregoing characterization was a new ground of rejection.

Appellant requested a rehearing on November 21, 2003, and the Appellee mailed a Response to Remand on April 14, 2004, consistent with the new ground of rejection. Appellee informed Appellant on April 25, 2005, via telephone, that no reply was required by Appellant. On March 3, 2006, in response to a formal status inquiry, Appellee remailed the Response to Remand, and set a 1-month non-extendable period for reply.

B. Reply to Examiner's Response to Remand

Appellee states that the components in the *Yamamoto* receiver are the same as that for any receiver, except that the transducers, i.e. display and camera, would have to be added.

Appellee also states that the bandwidth of the components may have to be adjusted for video, which is suggested by *Umezawa*, but that bandwidth adjustment may not be necessary. Appellee asserts that the bandwidth difference between a video and audio signal is so well known that a skilled artist making the change suggested by *Umezawa* would necessarily make the change such that the phone would work. Then, Appellee asserts that a bandwidth change is not absolutely necessary because *Yamamoto* teaches TDMA, and the transmitters and receivers will convert the information to data bits. According to Appellee, because a video signal can be received with fewer bits per time slot, a less-perfect video signal can be received by the receiver of *Yamamoto*, and will appear as slower motion, non-fluid motion, or with softer edges.

Appellant respectfully disagrees with the Appellee. Appellee's assertion that the components in *Yamamoto* are the same as that for any receiver, except that the transducers (camera and display) would have to be added is a gross oversimplification of the changes necessary to modify the system of *Yamamoto* to meet the claims. Although both a radio and a television use a tuner circuit in which a mixer and local oscillator are used to covert a signal of interest from a carrier frequency to a baseband signal, it is ridiculous to state that one could simply replace the speaker (transducer) of such a radio with a display (different transducer) and be successful in converting the radio to a television. In order to process video signals, not only does the television require circuitry in addition to that of the radio (e.g., verticle and horizontal drive circuits), but the components common to both the radio and the television must be significantly different. For example, pass bands of filters must be altered to accommodate the video channels (e.g., 6 MHz channel bandwidth) which are broader than the audio channels (e.g., 180 KHz). Additionally the local oscillator frequencies must be selected differently, because of the different carrier frequencies associated with the video and audio signals and because of the different filter passband widths, in order to avoid images in any intermediate frequencies and the baseband. Accordingly, substantial unsuggested modification would be required in order to modify the system of *Yamamoto* to usefully accommodate input of a video signal at the antenna thereof.

Supporting Appellant's position is the fact that the antenna of *Yamamoto* would typically receive all broadcast signals, which would include both the audio signals *Yamamoto* is designed to operate with as well as broadcast television signals. Nevertheless *Yamamot*

operates to provide output of only a selected audio signal. This is accomplished because the circuitry of *Yamamoto* (e.g., the filters, mixers, amplifiers, local oscillators, modulator, etc.) are specifically and uniquely designed and adapted to process particular signals and to reject all other signals. Although it might be possible to replace and/or modify enough of the circuitry of *Yamamoto* to cause the system therein to usefully process a video signal, such modification is well beyond that which one of ordinary skill in the art would have found obvious in light of the disclosure of the art of record. As "[a] person of ordinary skill in the art is . . . presumed to be one who thinks along the line of conventional wisdom in the art and is not one who undertakes to innovate, whether by patient, and often expensive, systematic research or by extraordinary insights," Standard Oil Co. v. American Cyanamid Co., 227 U.S.P.Q. 293, 298 (Fed. Cir. 1985), such a person would not have been led to implement the numerous, substantial, and unsuggested modifications required to make the system of *Yamamoto* usefully process video signals.

In providing reasoning as to how *Yamamto* might be able to process video signals without substantial modifications, Appellee appears to be reading non-existing features into *Yamamoto*. Specifically, the Appellee asserts that TDMA signals could accommodate video data (albeit at a low quality) in a TDMA data packet in place of audio data. However, Figure 1 of *Yamamoto* shows analog – not digital – information processed by amplifiers 13 and 16, mixer 14, and filters 15 and 17. *Yamamoto* does not disclose and digital-to-analog converters (DACs), digital storage, or digital compression/decompression functions in the demodulation path that would allow *Yamamoto's* TDMA scheme to operate as Appellee suggests.

Specifically, *Yamamoto* discloses that the IF signal passed through filter 15 is analog, and must be converted to digital before being interpreted by CPU 22. *Yamamoto*, col. 4, lines 52-61. Further, during the TDMA "off times," i.e. the periods between analog audio signal reception, the audio signal is stored in capacitor 2-3. *Yamamoto*, col. 6, lines 41-44 and 62-67. Applicant notes that *Yamamoto's* operation, i.e. charging a capacitor during periods of reception, and storage of signal levels in a capacitor between periods of reception, requires processing an analog signal, rather than a digital signal comprised of data bits. Thus, Appellee's suggested operation of receiving fewer bits of a video signal cannot function with the system disclosed by *Yamamoto*, without further extensive, unsuggested modification.

Further, Appellee is also incorrect in the assertion that adjustment of the bandwidth of the components is suggested by *Umezawa*, or alternatively, that a bandwidth change may not be necessary. Appellant notes that *Yamamoto* teaches an analog audio demodulator, and that Figures 2, 4 and 5 of *Yamamoto* show that the audio signals already completely fill the available TDMA bandwidth. Appellant also notes that Appellee concedes that the bandwidth difference between video and audio signal is well-known. Therefore, Appellee's assertion that a bandwidth change may not be necessary is incorrect, because the TDMA system of *Yamamoto* could not support video signals without modifying the bandwidth of the circuit components. Additionally, *Umezawa* teaches transmission of digitized images in addition to audio data. Appellant asserts that one of skill in the art would not see any suggestion in *Umezawa* to modify the bandwidth of *Yamamoto's* analog audio circuit components in order to accommodate digitized video signals.

In light of the foregoing, Appellant respectfully requests that the Board reverse the 35 U.S.C. § 103(a) rejections of claims 1 and 7, and the claims dependent therefrom.

IV. CONCLUSION

Appellant respectfully requests that the Board reverse the rejections of pending claims 1-19 for the above reasons.

Dated: 03/31/2006

Respectfully submitted,

By _____
R. Ross Viguet
Registration No.: 42,203
FULBRIGHT & JAWORSKI L.L.P.
2200 Ross Avenue, Suite 2800
Dallas, Texas 75201-2784
(214) 855-8185
(214) 855-8200 (Fax)
Attorney for Applicant

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV568259534US, on the date shown below in an envelope addressed to: MS Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: 03/31/2006

Signature: _____
(Phyllis Ewing)

PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	08/579,072-Conf. #3750
Filing Date	December 22, 1995
First Named Inventor	Adam S. Wyszynski
Art Unit	2684
Examiner Name	N. A. Maung
Total Number of Pages in This Submission: 7	Attorney Docket Number: 49581/P006US/09604915

ENCLOSURES (*Check all that apply*)

- [ ] Fee Transmittal Form
  - [ ] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
  - [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
  - [ ] Landscape Table on CD
- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [x] Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
- [ ] Proprietary Information
- [ ] Status Letter
- [x] Other Enclosure(s) (please identify below):

  Return Receipt Postcard (1)

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	FULBRIGHT & JAWORSKI L.L.P.		
Signature	R. Ross Viguet		
Printed name	R. Ross Viguet		
Date	March 31, 2006	Reg. No.	42,203

Transmittal

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV568259534US, on the date shown below in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: March 31, 2006 Signature: _____ (Phyllis Ewing)